METHOD, SYSTEM AND PROGRAM PRODUCT FOR ACTIVELY MANAGING CENTRAL QUEUE BUFFER ALLOCATION USING A BACKPRESSURE MECHANISM

Abstract of the Disclosure

Method, system and program product are provided for packet flow control for a switching node of a data transfer network. The method includes actively managing space allocations in a central queue of a switching node allotted to the ports of the switching node based on the amount of unused space currently available in the central queue and an amount of currently-vacant storage space in a storage device of a port. In a further aspect, the method includes separately tracking unallocated space and vacated allocated space, which had been used to buffer packets received by the ports but were vacated since a previous management update due to a packet being removed from the central queue. Each port is offered vacated space that is currently allocated to that port and a quantity of the currently unallocated space in the central queue to distribute to one or more virtual lanes of the port.